

AMENDMENT TO CLAIMS

This listing of claims replaces all prior listings, and versions, of claims in the application.

1. (Currently amended) A method for treating or preventing a neurodegenerative disease, comprising administering to a subject in need of such treatment or prevention a therapeutically effective amount of a GPR49-interacting molecule. ~~Use of a GPR49-interacting molecule for the preparation of a pharmaceutical composition for the treatment of a neurodegenerative disease.~~
2. (Currently amended) The ~~use~~ method of claim 1, wherein the GPR49-interacting molecule is a GPR49-inhibitor.
3. (Currently amended) The ~~use~~ method of claim 2, wherein the inhibitor is selected from the group consisting of antibodies, antisense oligonucleotides, siRNA, low molecular weight molecules (LMWs), binding peptides, aptamers, ribozymes and peptidomimetics.
4. (Currently amended) The ~~use~~ method of ~~any of~~ claims 1 ~~to~~ 3, wherein GPR49 is part of an intracellular protein complex.
5. (Currently amended) The ~~use~~ method of ~~any of~~ claims 1 ~~to~~ 4, wherein the interacting molecule or inhibitor modulates the activity of gamma-secretase and/or beta-secretase.
6. (Currently amended) The ~~use~~ method of ~~any of~~ claims 1 ~~to~~ 5, wherein the neurodegenerative disease is Alzheimer's disease.
7. (Original) A method for identifying a gamma-secretase and/or a beta-secretase

modulator, comprising the following steps:

- a. identifying of a GPR49-interacting molecule by determining whether a given test compound is a GPR49-interacting molecule,
 - b. determining whether the GPR49-interacting molecule of step a) is capable of modulating gamma-secretase and/or beta-secretase activity.
8. (Original) The method of claim 7, wherein in step a) the test compound is brought into contact with GPR49 and the interaction of GPR49 with the test compound is determined.
9. (Original) The method of claim 8, wherein the interaction of the test compound with GPR49 results in an inhibition of GPR49 activity.
10. (Currently amended) The method of ~~any of~~ claims 7 ~~to 9~~, wherein in step b) the ability of the gamma-secretase and/or the beta-secrease to cleave APP is measured, preferably wherein the ability to produce Abeta 42 is measured.
11. (Currently amended) A method for preparing a pharmaceutical composition for the treatment of neurodegenerative diseases, comprising the following steps:
 - a. identifying a gamma-secretase and/or beta-secretase modulator according to claims 7 ~~to 10~~, and
 - b. formulating the gamma-secretase and/or beta-secretase modulator to a pharmaceutical composition.

12. (Original) The method of claim 11, further comprising the step of mixing the identified molecule with a pharmaceutically acceptable carrier.

13-17. (Cancelled).